

tectural irregularity, but would be in their symmetrical direction as radiating from a centre. The circular design of Professor Magnus is contrived according to the annexed plan, Figure 3.

Here again he supposes the windows to reach nearly to the ceiling. The extent of the screens from the external wall towards the centre would be regulated by the light, leaving a circular space in the centre for staircases. Opposite each window a statue is supposed to be placed; other details are sufficiently explained by the plan. The same contrivance would be available for more than one story, and might be combined with the employment of a skylight in the uppermost room."

This plan Mr. Eastlake considers to be the least objectionable mode in which a side light can be employed, although fitter for modern exhibitions than for a national gallery. "Nevertheless, it is fair to state that the side light, even with the picture-walls or screens at right angles to the main walls, and without reference to a circular plan, has its advocates. The directors of the Galleries of Dresden and Berlin (Baron de Friesen and Dr. Waagen) both recommend it. It has even been adopted at Berlin and (for modern pictures) at Dresden. The arguments in favour of this opinion seem to be inconclusive. Dr. Waagen, in a letter addressed to me in November, 1840, observes, "that kind of light which the painter considered the best for the execution of his work must also be the best to see it in." To this it may be replied "that, if a picture be painted with a side light from the left (and this is nearly always the case), we have only to show it with a side light from the right, to reverse all the advantages arising from this consideration. It may be added, that in the practice of historical, portrait, or still-life painters, the necessity of lighting the model or object to be copied, advantageously, is still more important than that of lighting the picture. A somewhat elevated light displays natural objects well, but a skylight is by no means favourable."

"On the whole I see no reason to alter the opinion which I expressed on a former occasion,* viz., that the window or source of light by which a picture is seen, and the picture itself, ought not both to come within the range of vision at the same time. This general condition may comprehend the side light under the restrictions before alluded to; but it may be safely asserted, that a light from above, if sufficiently abundant, is always the fittest for large pictures."

With respect to the colour of the walls on which pictures are to be hung, it may be observed that a picture will be seen to advantage on a ground brighter than its darks and darker than its lights, and of so subdued a tint as may contrast well with its brighter colours. The choice of that tint should, I conceive, be regulated by the condition of its harmonizing with the colour of gold, with which it is more immediately in contact; but this is not all; supposing the most advantageous hue to be employed for the wall, it is not to be concluded that boards painted of that hue will have a satisfactory effect. The refined and harmonious tones of pictures, and the soft splendour of gilding around them, require to be supported by materials of corresponding richness, or at least by a certain finish, in the appearance of what surrounds them. The whole question is of less consequence where paintings are numerous enough nearly to hide the walls; but while the latter make a considerable part of the impression on the eye, that impression is not to be neglected."

We have given this portion of the letter at length, because the best arrangement of picture galleries is one of considerable interest and is still matter of dispute.

The want of room for the accommodation of artists and others copying in the National Gallery is then pointed out, and the conclusion is arrived at that a larger building is already absolutely necessary. "It is not for me to offer any suggestion as to the fittest place for such a building, but there are certain conditions which, with reference to the preservation of pictures and other requisites, should be borne in mind in selecting a locality."

The main question seems to be, whether

it is desirable that a National Gallery of pictures should be in the heart of the metropolis, or in the suburbs. In the first case it is more accessible to the public at large—undoubtedly a strong point in favour of such a view. Assuming such a situation to be the fittest, it would, I consider, be expedient to provide against the injurious effect before adverted to, of a sooty atmosphere. This inconvenience, looking to the experiments of Dr. Reid, could certainly be prevented; and it appears that the means employed to prevent it would not at all interfere with the light, as the circulation of air would be independent of the windows. It is admitted that the evil in question—the accumulation of soot, would not be materially lessened (depending, as it does, on the direction of the wind) by selecting a site on the outskirts of London; and therefore the precautions recommended would still be necessary, wherever the building might be, since it could in no case be very remote. But light and ventilation, if not freedom from dust, would undoubtedly be more secured by avoiding the thickly-inhabited parts of the metropolis.

In the event of a central situation being preferred, it might be a question whether the present gallery could be enlarged, as there is considerable space on the north side. I need not inquire how far it might be possible in that case for the skill of the architect to adapt the building to a larger plan; but to combine such an object with a sufficiently symmetrical design would perhaps be scarcely compatible with the existence of the present exterior. Abundant space is, at all events, necessary; for it is most desirable that the plan, however apparently comprehensive, should be capable of extension. This is one of the fortunate circumstances attending the site of the British Museum.

This last requisite would doubtless be more easily attained by removing to the suburbs. Hyde Park has been mentioned in Parliament as a fit situation. Supposing this site to be adopted, its advantages might be combined, as far as possible, with the condition of vicinity to public thoroughfares, by selecting the immediate neighbourhood of either of the roads that bound the Park."

Mr. Eastlake terminates his excellent letter with the expression of a hope that the National Gallery, while rich in the works of the great masters, may, by degrees, merit its designation in another sense, and that a portion of the new edifice may be dedicated to the reception of the best works of the British School. Mr. Eastlake has already done much to advance British art; unless we are greatly mistaken, he will soon be in a position to do more, and we have no doubt will avail himself of it to the fullest extent.

ELY CATHEDRAL.

A CORRESPONDENT of the *Athenæum* said last week:—"As you sometimes take notice of the repairs and improvements which our national architecture is undergoing, I thought some account of the present state of Ely Cathedral might not be unacceptable to you. When I visited Ely a year or two since, I could not help lamenting the serious dilapidations which the cathedral was daily undergoing, and the worse than useless repairs which in several places evinced a feeble attempt to arrest them. Every part of this edifice, which in splendour and extent hardly yields to any in the kingdom, has from time to time, fallen under the degraded taste of ignorant economy, and instead of repairs accomplished in the spirit of architecture, we had brickwork in the place of stonework, pointed tracery under Roman arches, and Italian doorways inserted side by side with windows filled with zig-zag mouldings, and in the vicinity of the triumphs of Alan de Walsingham. The work of restoration has at length I hope fallen into competent hands, and the present dean, whom your scientific readers will at once recognize under the more familiar name of Professor Peacock, has commenced the labour of restoring this noble edifice with a zeal to which its various interests entitle it."

When I entered the cathedral last week, I was surprised by the sound of masons, carpenters, cranes, and pulleys. In the choir a chaffern-fire was burning, tall scaffold-frames were standing near, and three or four work-

men were rubbing and polishing pillars of Purbeck marble, while others were stopping the holes and gaps which had been perhaps wantonly hacked upon them. Outside the windows which light four sides of the celebrated lantern, several masons were busily engaged, and the south-western transept, where all the grandeur and solidity and variety of the Anglo-Norman architecture seems concentrated, was literally crisscrossed with masons at their labours.

These are signs of better things. The endowments of Ely have been on a princely scale; but the conservators of its church seem to have been more than usually negligent. The puritan ordonnance commanding the destruction of images did much to despoil Ely, especially the admirable tabernacle work of its tombs and chapels, but on the whole it has perhaps suffered more from the neglect, or even the activity of its friends, than the barbarous policy of its enemies. From the western porch to the east windows it is covered with one universal coat of stone-coloured wash, if we except the six pillars of the ante-choir. These are of light-coloured Madrapore marble, and support some of the richest arch-work conceivable, all blunted and discoloured with ochrey wash. The whole of the choir has submitted to the same degradation, so that it was hardly suspected till lately that the pillars supporting the lower arches, and the slender shafts of the triforium with the foliated brackets and columns which support the groining of the roof and the string-courses dividing each story, were all of beautiful Purbeck marble. Several of the shafts have been cleaned and polished, and those dividing the lancet lights of the east window are to follow. As in most of the other works of this period the Purbeck marble has only been partially used, the rest of the work consisting of quatre and trefoil ornaments, the moulding of arches, and the principal part of the clerestory being of Ketton stone and clunch. We cannot suppose that economy dictated this partial use of marble, when we see such unsparring richness in other parts of this cathedral, but are forced to appeal to some other motive, which may perhaps be suggested in the extreme darkness of the Purbeck marble, which, while it pointed out its partial use in connection with a lighter material, seems to have prevented its adoption for entire buildings by giving them too dark and mournful an appearance. Associated with white, or nearly white stone, it gives distinctness to that fine gothic work which is sometimes apt to be overlooked in its minutest parts; and when the degrading lime-wash, under which the sharpness and character of the choir at Ely is lost shall be removed, it may be readily conceived how admirable the colour as well as the clearness and design of this part of the cathedral will appear. The mouldings, foliage, and ribs have been so drenched by the brush and lime-pail that they appear as if they had emanated from a worn-up mould, whereas originally they must have presented the sharpest lines and finest contrasts.

Formerly the eight lancet lights that occupy the east end of the choir were filled with painted glass, which the parliamentary commands of the Commonwealth caused to be destroyed. Bishop Sparke, who died in 1634, left in his will a sum of money to be expended on their restoration, and they are to be forthwith commenced, as well as the four windows which occupy the alternate sides of the octagon. The effect of these, if properly executed, may be conceived by those who are acquainted with the purity and beauty of the architecture by which they will be accompanied. T. C.

ZINC THREAD.—The *Moniteur Industriel* announces that an important discovery in the manufacture of zinc thread has been effected by M. Boucher, who, after many essays, has at length been able to produce zinc threads of any diameter, of great suppleness, and presenting all the qualities of an excellent metal thread. In all cases where a great tension is not required, this thread can be substituted with advantage for that of iron, brass, or copper. The price of zinc has doubled during the last few years, but, notwithstanding, M. Boucher vends his thread at a lower price than the galvanic iron thread, and considerably less than brass thread.

* Report on the mode of lighting the Randolph Gallery at Oxford.